1. (AMENDED) An antenna, comprising:

a ground plane having a first planar surface and a first area;

a radiating element having a second planar surface and a second area, wherein the second planar surface of said radiating element is substantially ~~coplanar~~ in parallel with the first planar surface of said ground plane;

a first connecting line coupled to a first edge of said ground plane and to a second edge of said radiating element at a first contact location; and

a second connecting line coupled to the second edge of said radiating element at second and third contact locations.

2. (Original) The antenna according to claim 1, wherein the first area of said ground plane is greater than the second area of said radiating element.

3. (Original) The antenna according to claim 1, wherein the first area of said ground plane area is substantially the same as the second area of said radiating element.

4. (Original) The antenna according to claim 1, wherein the first contact location is between the second and third contact locations.

5. (Original) The antenna according to claim 1, further comprising the second connecting line being coupled to the second edge of said radiating element at a plurality of contact locations.

6. (Original) The antenna according to claim 1, wher in the first and second connecting lines are adapted for a desired impedance.

7. (Original) The antenna according to claim 6, wherein the desired impedance is about 50 ohms.

8. (Original) The antenna according to claim 6, wherein the desired impedance is from about 50 ohms to about 75 ohms.

9. (Original) The antenna according to claim 6, wherein the desired impedance is from about 20 ohms to about 300 ohms.

10. (Original) The antenna according to claim 1, wherein said radiating element is made of an electrically conductive material.

11. (Original) The antenna according to claim 10, wherein the electrically conductive material is selected from the group consisting of copper, aluminum, stainless steel, bronze and alloys thereof, copper foil on a insulating substrate, aluminum foil on a insulating substrate, gold foil on a insulating substrate, silver plated copper, silver plated copper foil on a insulating substrate, silver foil on a insulating substrate and tin plated copper, graphite impregnated cloth, a graphite coated substrate, a copper plated substrate, a bronze plated substrate and an aluminum plated substrate.

12. (Original) Th antenna according to claim 1, wherein said ground plane is made of an electrically conducting material.

13. (Original) The antenna according to claim 12, wherein the electrically conductive material is selected from the group consisting of copper, aluminum, stainless steel, bronze and alloys thereof, copper foil on a insulating substrate, aluminum foil on a insulating substrate, gold foil on a insulating substrate, silver plated copper, silver plated copper foil on a insulating substrate, silver foil on a insulating substrate and tin plated copper, graphite impregnated cloth, a graphite coated substrate, a copper plated substrate, a bronze plated substrate and an aluminum plated substrate.

14. (Original) The antenna according to claim 1, wherein said ground plane is on one side of an insulating substrate and said radiating element is on the other side of the insulating substrate.

15. (Original) The antenna according to claim 14, wherein said ground plane, the insulating substrate and said radiating element are flexible.

16. (Original) The antenna according to claim 1, wherein the first area of said ground plane and the second area of said radiating element are rectangular.

17. (Original) The antenna according to claim 1, wherein th first area of said ground plane and the s cond ar a of said radiating lement are non-rectangular.

18. (Original) The antenna according to claim 1, further comprising at least one opening in said radiating element for attachment of at least one mechanical support.

19. (Original) The antenna according to claim 1, further comprising at least one opening in said ground plane for attachment of at least one mechanical support.

20. (AMENDED) A planar inverted F antenna, comprising:
a ground plane having a first planar surface and a first area;
a radiating element having a second planar surface and a second area, wherein the second planar surface of said radiating element being substantially ~~coplanar~~ in parallel with the first planar surface of said ground plane;
a first connecting line coupled to an edge of said ground plan and to an edge of said radiating element; and
a second connecting line coupled to the edge of said radiating element on either side of where the first connecting line is coupled thereto.

21. (AMENDED) A planar inverted F antenna, comprising:

a ground plane having a first planar surface, a first circumference and a first plurality of edges on the first circumference;

a radiating element having a second planar surface, a second circumference and a second plurality of edges on the second circumference, the second planar surface of said radiating element being substantially ~~coplanar~~ in parallel with the first planar surface of said ground plane;

a first connecting line coupled to a first edge of the first plurality of edges and a first edge of the second plurality of edges; and

a second connecting line coupled to the first edge of the second plurality of edges on either side of the first connecting line.

22. (AMENDED) A method of fabricating a wide bandwidth planar inverted F antenna, comprising the steps of:

forming a ground plane on a first planar surface;

forming a radiating element on a second planar surface, wherein the second planar surface is substantially ~~coplanar~~ in parallel with the first planar surface;

coupling a first connecting line to a first edge of the ground plane and to a second edge of the radiating element at a first contact location; and

coupling a second connecting line to the second edge of the radiating element at second and third contact locations.

23. (Original) The method according to claim 22, wherein the first contact location is between the second and third contact locations.

24. (Original) The method according to claim 22, further comprising the step of coupling the second connecting line to the second edge of said radiating element at a plurality of contact locations.

25. (AMENDED)A radio system having a planar inverted F antenna (PIFA), said system comprising:
a ground plane having a first planar surface and a first area;
a radiating element having a second planar surface and a second area, wherein the second planar surface of said radiating element is substantially ~~coplanar~~ in parallel with the first planar surface of said ground plane;
a first connecting line coupled to a first edge of said ground plane and to a second edge of said radiating element at a first contact location; and
a second connecting line coupled to the second edge of said radiating element at second and third contact locations, and first and second connecting lines are adapted to couple to a radio at a desired impedance.

26. (Original) A radio system of claim 25 wherein said radio system is part of a mobile phone system.